**Regulatory and Economic Resources**
11805 SW 26th Street
Miami, Florida 33175-2474
786-315-2000

**miamidade.gov/permits/**

# INSTRUCTIONS TO OWNER-BUILDER

You have as of this date made application for a building permit as an owner-builder. You should be advised of the following provisions and requirements that apply to owner-builders:

**PROOF OF OWNERSHIP** – Prior to a building permit being issued to you, you must submit proof of ownership of the land concerned in the application in the form of a recorded deed, showing you own the property, or a copy of mortgage or warranty deed of the land, or a Miami-Dade County tax receipt statement to contain legal description of property and indicate property is in your name. Legal description and name on document of proof must correspond to the name and legal description on the application.

**RESPONSIBILITY** – You will be responsible for all work done by your day labor employees, and you must either employ licensed contractors or persons to be paid on an hourly or per diem basis. Any one contracting (including labor) with you, verbally or in writing, on a fixed fee basis for any work, who is not properly licensed, will be subject to a fine of $500 and/or imprisonment for six months.

**INSURANCE** –Be advised that if your day labor employees cause any damage to persons or property, or if any of your day labor employees are injured on the job, you are liable. Your regular home insurance policy ordinarily DOES NOT cover this type of liability.

**WITHHOLDING TAXES, etc.** – You should be advised to investigate your responsibility for withholding Social Security, Federal and State Unemployment Insurance Taxes and Federal Income Taxes from the wages of employees working for you on the proposed construction, and for making returns thereof to the proper agencies.

**DISCLOSURE STATEMENT** – State and county law requires construction or demolition to be done by licensed contractors. You have applied for a permit under an exemption to those laws. The exemption allows you, as the owner of the property, to act as your own contractor even though you do not have a license. You must supervise the construction of demolition yourself. You may build, improve or demolish a one-family or two-family residence. You may also maintain, alter or repair your own single family or duplex residence; or erect a one story building or addition of not more than 500 square feet for commercial or industrial use, or perform maintenance or repairs and non-structural alterations, not to exceed $5,000 on any building which you own or lease.

The building must be for your own use and occupancy. It may not be built for sale or lease. If you sell or lease more than one building you have built yourself within 2 years after the construction is complete, the law will presume that you built it for sale or lease, which is a violation of this exemption. You may not hire an unlicensed person as your contractor. Your construction or demolition must be done according to building codes and zoning regulations. It is your state law and by county or municipal licensing ordinances.

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**SEE REVERSED SIDE FOR ADDITIONAL INFORMATION**

**DEMOLITION WORK** – In addition to meeting Florida Building Code requirements stated above, you are responsible for disconnecting all utilities, including water, sewer, septic tank, electrical service, gas, telephone, cable TV, etc., PRIOR TO COMMENCING DEMOLITION. You are also required to obtain a permit from the State of Florida Department of Health and Rehabilitative Services in order to abandon any septic tank that is on the property.

If you do not intend to do the work involved yourself, or with day labor, please list below, the name of the individual or firm with whom you have entered (or will enter) into a contract for the work.

**NOTICE: SEPARATE PERMITS REQUIRED FOR ELECTRICAL, SEPTIC TANK ABANDONMENT, PLUMBING, ROOFING AND MECHANICAL WORK**

I, the owner of property described as X 14201 SW 8 Terrace Miami, FL 33184

---

do hereby certify that I have read the foregoing instructions, and am aware of my responsibilities and liabilities under my application for a building permit for construction work on the above described property.

WITNESS

X Eileen Mursuli
OWNER

BARBARA LOPEZ
Notary Public - State of Florida
My Comm. Expires Feb 4, 2017
Commission # EE 870398
Bonded Through National Notary Assn

X 3/11/2015
DATE

Sworn to and subscribed before me this March 11, 2015 by Eileen Mursuli who has produced a valid FL DL as identification

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**MILTON CUBAS, P.E., INC.**
1302 N.E. 125th Street – North Miami – Florida 33161
Phone (305) 891-4174 Fax (305) 891-4175
E-mail: miltoncubas@msn.com
www.miltoncubaspe.com



# COVER SHEET

**DATE:** 09-10-13

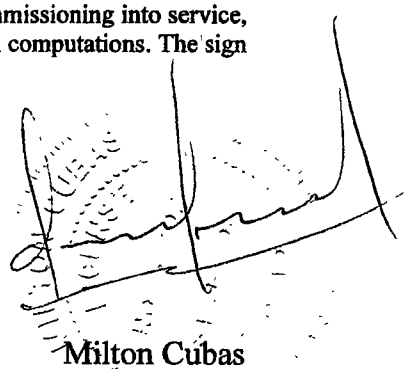
**PROJECT:** "FENCE 6'-0" W X 6'-0" H"
CONCRETE PRECAST FENCE

**ADDRESS:** SOUTH FLORIDA

**CLIENT:** M.A.D.I. CONSTRUCTION INC.

**DESIGN BY:** J.M.

This com putation b ook c ontains m anual and c omputerized st ructural cal culations, cert ain printed manufacturer's data and Computation pages are numbered 1 thru 9. Computations were performed to the best of our knowledge according to sound and generally accepted engineering principals and Code requirements, using nationally recognized computer software and in-house developed software. Prior to commissioning into service, the in-house developed software was thoroughly checked by performing parallel manual computations. The sign and seal provided herein are meant to cover all computation sheets pages 1 through 9.



Milton Cubas
Certification Authorization # 27267
F.L Reg. P.E # 51902
S.I. # 6999901

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MILTON CUBAS, P.E., INC.
CONSULTING ENGINEER
Milton Cubas
1302 N.E. 125 St. • North Miami, Florida 33161
Phone: 305-891-4174 • Fax: 305-891-4175
E-mail: mcubas99@worldnet.att.net

| Project | | | Design: |
|---|---|---|---|
| Subject | | Sheet No. | Inspection |
| Address | | | Investigation: |
| Job No. | Date: | Design by | Reports |

# POST EMBEDDED IN CONCRETE FOOTINGS IN EARTH

**F.B.C. 1819.7.2.1 UNCONSTRAINED**

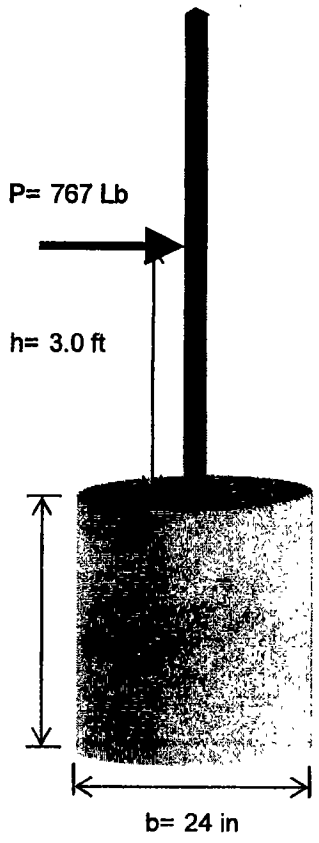
**b** = diameter of round post or diagonal dimension of square post or footing, feet.
**d** = depth of embedment in earth in feet but not over 12 feet for purpose of computing lateral pressure.
**h** = distance in feet from ground surface to point of application of P.
**P** = applied lateral force, pounds.
**S_1** = Allowable lateral soil-bearing pressure as set forth in Table §1819.6 based on a depth of one-third the depth of embedment, pounds per square foot.
**F = 2** (FBC 1819.6.1)

$S_3 = F \times S \times D$ $\qquad$ $d = 0.5\ A\ \{1 + [\ 1 + (\ 4.36\ h / A\ )\ ]\ ^{1/2}\ \}$

$S_1 = S_3$ $\qquad$ $A = 2.34\ P / (\ S\_1\ b\ )$

**P(ULTIMATE) = 1278 lb**

| TRIAL | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2.00 | 400.00 | 2.72 | 800 | 2.00 | 766.80 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |
| 2.00 | 400 | 2.72 | 800 | 2.00 | 766.8 | 3.00 | 1.24 | 2.72 |

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USE

**CONCRETE FOOTING**

**b = 24 " Ø and d = 33 " Deep**

**MILTON CUBAS, P.E., INC.**
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# INDEX

| DESCRIPTION | PAGE |
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| **PRECAST FENCE 6'-0" HEIGHT X 6'-0" WIDTH** | |
| Wind Analysis | 1 |
| Concrete Panel Design 12", 14" & 18" | 3 |
| Concrete Post Design | 6 |
| Foundation Design 12", 18", 24" Ø | 7 |

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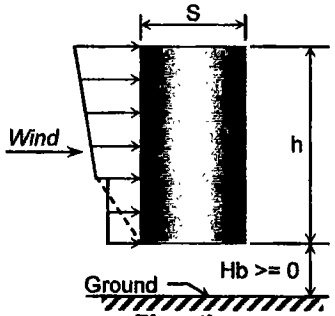
# WIND LOADING ANALYSIS - Chimneys, Stacks, and Vertical Tanks

## Per ASCE 7-10 Code for Freestanding Walls and Solid Signs

| Job Name: | PRECAST FENCE 6'-0" W X 6'-0" H | Subject: | M.A.D.I. CONCTRUCTION INC | |
|---|---|---|---|---|
| Job Number: | SOUTH FLORIDA | Originator: | AG | Checker: |

**Input Data:**

| | | |
|---|---|---|
| V = | 115 | mph (Wind Map) |
| Class. = | II | (Occupancy Category form Table 1-1) |
| Exposure = | C | (Exposure Category ) |
| Kzt = | 1.00 | (Topographic Factor) |
| h = | 6.00 | ft. (Height of Stack/Tank itself) |
| Hb = | 0.00 | ft. (Ht. of Stack/Tank Base Above Ground) |
| D = | 6.00 | ft. (Diameter or Width of Surface Normal to Wind) |
| Shape? | Square | (Round, Hexagonal, or Square) |
| β = | 1.000 | (Damping Ratio = 0.010-0.070) |
| Ct = | 0.2600 | (Period Coefficient = 0.020-0.035) |
| Kd = | 1.00 | (Direct. Factor) |
| Cf = | 1.450 | (Force Coef.) |



Elevation

**Resulting Parameters and Coefficients:**

If z < 15 then: Kz = 2.01*(15/zg)^(2/α)
If z >= 15 then: Kz = 2.01*(z/zg)^(2/α)

| | | |
|---|---|---|
| α = | 9.50 | |
| zg = | 900 | |
| I = | 1.00 | (Import. Factor) |
| h/D = | 1.000 | |
| freq., f = | 1.003 | Hz. (f >=1) Rigid |
| G = | 0.850 | (Gust Factor) |

Velocity Pressure :
qz = 0.00256*Kz*Kzt*Kd*V^2*I

Net Design Wind Pressures :
p = qz*G*Cf (psf)

Net Design Wind Forces :
F = qz*G*Cf*D (lb/ft)

**Resulting Total Base Shear & Moment:**

| | | |
|---|---|---|
| ΣV(total) = | 7.65 | kips |
| ΣM(total) = | 22.95 | ft-kips |

**Wind Load Tabulation for Stack / Tank**

| z (ft.) | Kz | q (psf) | p=qh*G*Cf (psf) | F=qh*G*Cf*A (lb/ft) |
|---|---|---|---|---|
| 0.00 | 0.85 | 28.74 | 35.42 | 1275.19 |
| 5.00 | 0.85 | 28.74 | 35.42 | 1275.19 |
| 6.00 | 0.85 | 28.74 | 35.42 | 1275.19 |

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**Determination of Gust Effect Factor, G:**

Flexible? No  f >=1 Hz.

**1:** Simplified Method for Rigid Structure

G = 0.85

Parameters Used in Both Item #2 and Item #3 Calculations:

| | | |
|---|---|---|
| α^ = | 0.105 | |
| b^ = | 1.00 | |
| α(bar) = | 0.154 | |
| b(bar) = | 0.65 | |
| c = | 0.20 | |
| $l$ = | 500 | ft. |
| ε(bar) = | 0.200 | |
| z(min) = | 15 | ft. |

Calculated Parameters Used in Both Rigid and/or Flexible Structure Calculations:

| | | |
|---|---|---|
| z(bar) = | 15.00 | = 0.6*h , but not < z(min) , ft. |
| Iz(bar) = | 0.228 | = c*(33/z(bar))^(1/6) , |
| Lz(bar) = | 427.06 | = $l$*(z(bar)/33)^(ε(bar)) |
| gq = | 3.4 | (3.4) |
| gv = | 3.4 | (3.4) |
| gr = | 4.190 | = (2*(LN(3600*f)))^(1/2)+0.577/(2*LN(3600*f))^(1/2) , |
| Q = | 0.968 | = (1/(1+0.63*((B+h)/Lz(bar))^0.63))^(1/2) , |

**2:** Calculation of G for Rigid Structure

G = 0.908  = 0.925*((1+1.7*gq*Iz(bar)*Q)/(1+1.7*gv*Iz(bar))) ,

**3:** Calculation of Gf for Flexible Structure

| | | |
|---|---|---|
| β = | 1.000 | Damping Ratio |
| Ct = | 0.260 | Period Coefficient |
| T = | 0.997 | = Ct*h^(3/4) , sec. (Approximate fundamental period) |
| f = | 1.003 | = 1/T , Hz. (Natural Frequency) |
| V(fps) = | N.A. | = V(mph)*(88/60) , ft./sec. |
| V(bar,zbar) = | N.A. | = b(bar)*(z(bar)/33)^(α(bar))*V*(88/60) , ft./sec. , |
| N1 = | N.A. | = f*Lz(bar)/(V(bar,zbar)) , |
| Rn = | N.A. | = 7.47*N1/(1+10.3*N1)^(5/3) , |
| ηh = | N.A. | = 4.6*f*h/(V(bar,zbar)) |
| Rh = | N.A. | = (1/ηh)-1/(2*ηh^2)*(1-e^(-2*ηh)) for ηh > 0, or = 1 for ηh = 0 |
| ηb = | N.A. | = 4.6*f*D/(V(bar,zbar)) |
| RB = | N.A. | = (1/ηb)-1/(2*ηb^2)*(1-e^(-2*ηb)) for ηb > 0, or = 1 for ηb = 0 |
| ηd = | N.A. | = 15.4*f*D/(V(bar,zbar)) |
| RL = | N.A. | = (1/ηd)-1/(2*ηd^2)*(1-e^(-2*ηd)) for ηd > 0, or = 1 for ηd = 0 |
| R = | N.A. | = ((1/β)*Rn*Rh*RB*(0.53+0.47*RL))^(1/2) , Eq. 6-10 |
| Gf = | N.A. | = 0.925*(1+1.7*Iz(bar)*(gq^2*Q^2+gr^2*R^2)^(1/2))/(1+1.7*gv*Iz(bar)) |
| Use: G = | 0.850 | |

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# CONCRETE REINFORCEMENT CALCULATION

| | |
|---|---|
| **Job:** | M.A.D.I CONSTRUCTION |
| **Addres:** | SOUTH FLORIDA |
| **Subject:** | PANEL FENCE 6'-0" X 6'-0" |
| **Design** | JM |

| INPUT DATA | |
|---|---|
| b | 12.0 in |
| h | 2.0 in |
| d' | 1.00 in |
| f'c | 3,000 PSI |
| Fy | 40,000 PSI |
| Mu | 160 Lb*Ft |

wind pressure = 35.5 psf

l = 6. ft

W = wind pressure x b = 35.5 Lb/ft

$M = \frac{W \times l^2}{8}$ = 159.8 Lb-ft

Mu = 0.9D + W = 159.8 Lb-ft

Vu = 106.5 Lb

| OUTPUT DATA | |
|---|---|
| d= | 1.00 in |
| K | 160 |
| m | 15.69 |
| ρ max | 0.016 |
| ρ min | 0.0033 |
| ρ | 0.0046 |
| Vap. | 106.5 # |
| Vallow. | 985.90 # |
| As | 0.06 SQ IN |
| ϕ Reinf. | # 3 |
| Area | 0.11 SQ IN |
| Conf. | 0.500 |
| @ | 19.90 in |

$\Rightarrow k = \frac{(Mu * 12)}{(b * d^2)}$

$\Rightarrow m = \frac{F_y}{\phi f_c'}$

$\Rightarrow \rho = \left(\frac{1}{m}\right) * \left(1 - \sqrt{1 - \frac{(2 * m * k)}{0.9 * F_y}}\right)$ OK

$\Rightarrow V_{allow} = \phi * 2 * \sqrt{f_c'} * b * d$ OK

TIMES

| USE | 2 #3 EACH SEC o/c |
|---|---|

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# CONCRETE REINFORCEMENT CALCULATION

| | |
|---|---|
| **Job:** | PRECAST FENCE USA |
| **Addres:** | |
| **Subject:** | PANEL FENCE 6'-0" X 6'-0" |
| **Design** | JM |

| INPUT DATA | |
|---|---|
| b | 14.0 in |
| h | 2.0 in |
| d' | 1.00 in |
| f'c | 3,000 PSI |
| Fy | 40,000 PSI |
| Mu | 186 Lb*Ft |

wind pressure = 35.5 psf

l = 6. ft

W = wind pressure x b = 41.42 Lb/ft

$M = \frac{W \times l^2}{8} =$ 186.4 Lb-ft

Mu = 0.9D + W = 186.4 Lb-ft

Vu = 124.3 Lb

| OUTPUT DATA | |
|---|---|
| d= | 1.00 in |
| K | 160 |
| m | 15.69 |
| ρ max | 0.016 |
| ρ min | 0.0033 |
| ρ | 0.0046 |
| Vap. | 124.25 # |
| Vallow. | 1150.22 # |
| As | 0.06 SQ IN |
| ϕ Reinf. | # 3 |
| Area | 0.11 SQ IN |
| Conf. | 0.584 |
| @ | 20.50 in |

$\Rightarrow k = (Mu * 12) / (b * d^2)$

$\Rightarrow m = F_y / \phi f_c'$

$\Rightarrow \rho = \left(\frac{1}{m}\right) * \left(1 - \sqrt{1 - \frac{(2 * m * k)}{0.9 * F_y}}\right)$ OK

$\Rightarrow V_{allow} = \phi * 2 * \sqrt{f_c'} * b * d$ OK

TIMES

| USE | 2 #3 EACH SEC o/c |
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## CONCRETE REINFORCEMENT CALCULATION

| | |
|---|---|
| **Job:** | PRECAST FENCE USA |
| **Addres:** | |
| **Subject:** | PANEL FENCE 6'-0" X 6'-0" |
| **Design** | JM |

| INPUT DATA | |
|---|---|
| b | 18.0 in |
| h | 2.0 in |
| d' | 1.00 in |
| f'c | 3,000 PSI |
| Fy | 40,000 PSI |
| Mu | 240 Lb*Ft |

wind pressure = 35.5 psf

l = 6. ft

W = wind pressure x b = 53.25 Lb/ft

$M = \frac{W \times l^2}{8} =$ 239.6 Lb-ft

Mu = 0.9D + W = 239.6 Lb-ft

Vu = 159.8 Lb

| OUTPUT DATA | |
|---|---|
| d= | 1.00 in |
| K | 160 |
| m | 15.69 |
| ρ max | 0.016 |
| ρ min | 0.0033 |
| ρ | 0.0046 |
| Vap. | 159.75 # |
| Vallow. | 1478.85 # |
| As | 0.08 SQ IN |
| ϕ Reinf. | # 3 |
| Area | 0.11 SQ IN |
| Conf. | 0.750 |
| @ | 21.30 in |

$\Rightarrow k = (Mu * 12) / (b * d^2)$

$\Rightarrow m = F_y / \phi f_c'$

$\Rightarrow \rho = \left(\frac{1}{m}\right) * \left(1 - \sqrt{1 - \frac{(2 * m * k)}{0.9 * F_y}}\right)$ OK

$\Rightarrow V_{allow} = \phi * 2 * \sqrt{f_c'} * b * d$ OK

TIMES

| USE | 2 #3 EACH SEC o/c |
|---|---|

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# CONCRETE REINFORCEMENT CALCULATION

| | |
|---|---|
| **Job:** | FENCE 6 X 6 |
| **Addres:** | |
| **Subject:** | POST FENCE |
| **Design** | JM |

| INPUT DATA | |
|---|---|
| b | 6.0 in |
| h | 6.0 in |
| d' | 1.25 in |
| f'c | 3,000 PSI |
| Fy | 60,000 PSI |
| Mu | 3,834 Lb*Ft |

wind pressure = 35.5 psf
width = 6. ft
l = 6. ft
W = wind pressure x width = 213. Lb/ft
$M = \frac{W \times l^2}{2}$ = 3834. Lb-ft
Mu = MW = 3834. Lb-ft
V = W x l = 1278. Lb

| OUTPUT DATA | |
|---|---|
| d= | 4.75 in |
| K | 340 |
| m | 23.53 |
| ρ max | 0.016 |
| ρ min | 0.0033 |
| ρ | 0.0068 |
| Vap. | 1278 # |
| Vallow. | 2341.51 # |
| As | 0.20 SQ IN |
| ϕ Reinf. | # 3 |
| Area | 0.11 SQ IN |
| Conf. | 0.994 |
| @ | 3.52 in |

$\Rightarrow k = (Mu * 12) / (b * d^2)$

$\Rightarrow m = F_y / \phi f_c'$

$\Rightarrow \rho = \left(\frac{1}{m}\right) * \left(1 - \sqrt{1 - \frac{(2 * m * k)}{0.9 * F_y}}\right)$ OK

$\Rightarrow V_{allow} = \phi * 2 * \sqrt{f_c'} * b * d$ OK

TIMES

| USE | #3 EACH SEC o/c |
|---|---|

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Phone: 305-891-4174 * Fax: 305-891-4175
E-mail: moubas99@worldnet.att.net

| Project: | | | Design: |
|---|---|---|---|
| Subject: | | Sheet No. | Inspection: |
| Address: | | of sheets | Investigation: |
| Job No: | Date: | Design By: | Reports: |

# POST EMBEDDED IN CONCRETE FOOTINGS IN EARTH

**F.B.C. 1819.7.2.1 UNCONSTRAINED**

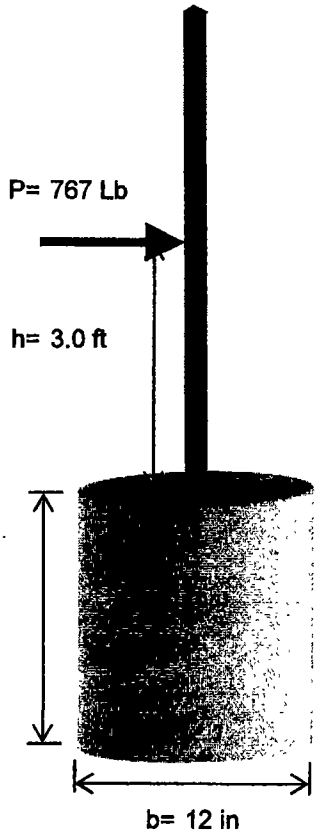
**b** = diameter of round post or diagonal dimension of square post or footing, feet.
**d** = depth of embedment in earth in feet but not over 12 feet for purpose of computing lateral pressure.
**h** = distance in feet from ground surface to point of application of P.
**P** = applied lateral force, pounds.
**S_1** = Allowable lateral soil-bearing pressure as set forth in Table §1819.6 based on a depth of one-third the depth of embedment, pounds per square foot.
**F = 2** (FBC 1819.6.1)

$S_3 = F \times S \times D$ $\qquad$ $d = 0.5\ A\ \{1 + [\ 1 + (\ 4.36\ h / A\ )\ ]\ ^{1/2}\ \}$

$S_1 = S_3$ $\qquad$ $A = 2.34\ P / (\ S\_1\ b\ )$

**P(ULTIMATE) = 1278 lb**

| TRIAL | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| S | | | | | | | | |
| 2.00 | 400.00 | 3.58 | 800 | 1.00 | 766.80 | 3.00 | 1.87 | 3.58 |
| 2.00 | 400 | 3.58 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |
| 2.00 | 400 | 3.59 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |
| 2.00 | 400 | 3.59 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |
| 2.00 | 400 | 3.59 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |
| 2.00 | 400 | 3.59 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |
| 2.00 | 400 | 3.59 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |
| 2.00 | 400 | 3.59 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |
| 2.00 | 400 | 3.59 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |
| 2.00 | 400 | 3.59 | 800 | 1.00 | 766.8 | 3.00 | 1.88 | 3.59 |




**USE**

**CONCRETE FOOTING**

**b = 12 " Ø and d = 43 " Deep**

Miami Dade County Department of Regulatory And Economic Resources
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GENERAL 05122015.pdf
Examiner Date Time Stamp Disp. Trade Stamp Name
Carlos Laboiste 3/13/2015 11:16:16 AM A STRU Approved

MILTON CUBAS, P.E., INC.
CONSULTING ENGINEER

Milton Cubas

1302 N.E. 125 ST. • North Miami, Florida 33161
Phone: 305-891-4174 • Fax: 305-891-4175
E-mail: mcubas99@worldnet.att.net

| Project: | | | Design: |
|---|---|---|---|
| Subject: | | Sheet No. | Checked by: |
| Address: | | of sheets | Investigation: |
| Job No. | Date: | Design by: | Reports: |

# POST EMBEDDED IN CONCRETE FOOTINGS IN EARTH

**F.B.C. 1819.7.2.1 UNCONSTRAINED**

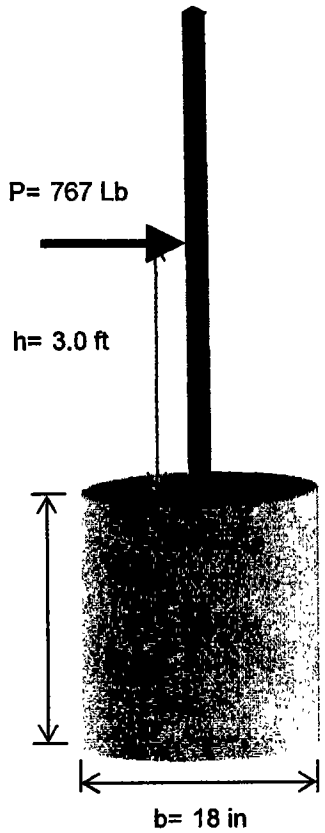
**b** = diameter of round post or diagonal dimension of square post or footing, feet.
**d** = depth of embedment in earth in feet but not over 12 feet for purpose of computing lateral pressure.
**h** = distance in feet from ground surface to point of application of P.
**P** = applied lateral force, pounds.
**S_1** = Allowable lateral soil-bearing pressure as set forth in Table §1819.6 based on a depth of one-third the depth of embedment, pounds per square foot.
**F = 2** (FBC 1819.6.1)

$S_3 = F \times S \times D$ $\qquad$ $d = 0.5\ A\ \{1 + [\ 1 + (\ 4.36\ h / A\ )\ ]\ ^{1/2}\ \}$

$S_1 = S_3$ $\qquad$ $A = 2.34\ P / (\ S\_1\ b\ )$

**P(ULTIMATE) = 1278 lb**

| TRIAL | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2.00 | 400.00 | 3.05 | 800 | 1.50 | 766.80 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |
| 2.00 | 400 | 3.05 | 800 | 1.50 | 766.8 | 3.00 | 1.47 | 3.05 |

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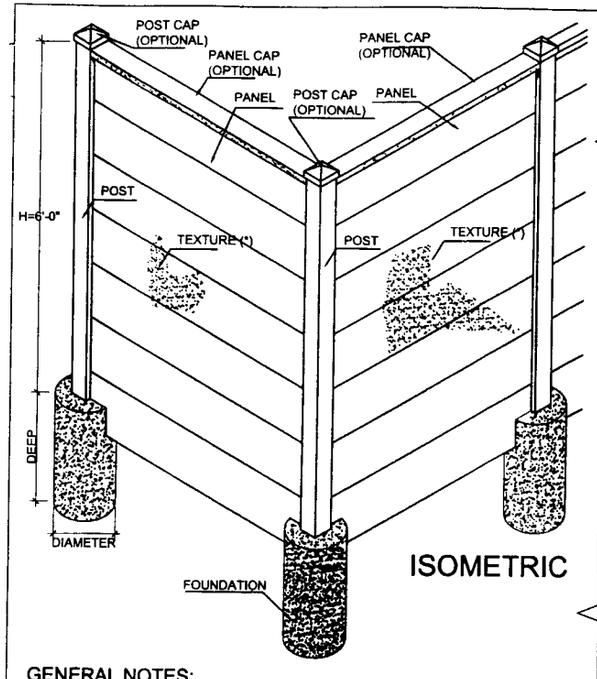
GENERAL CONCRETE Approved
Examiner Date/Time Stamp Disp. Trade Stamp Name
Carlos Labiste 3/13/2015 11:16:16 AM A STRU Approved

**USE**

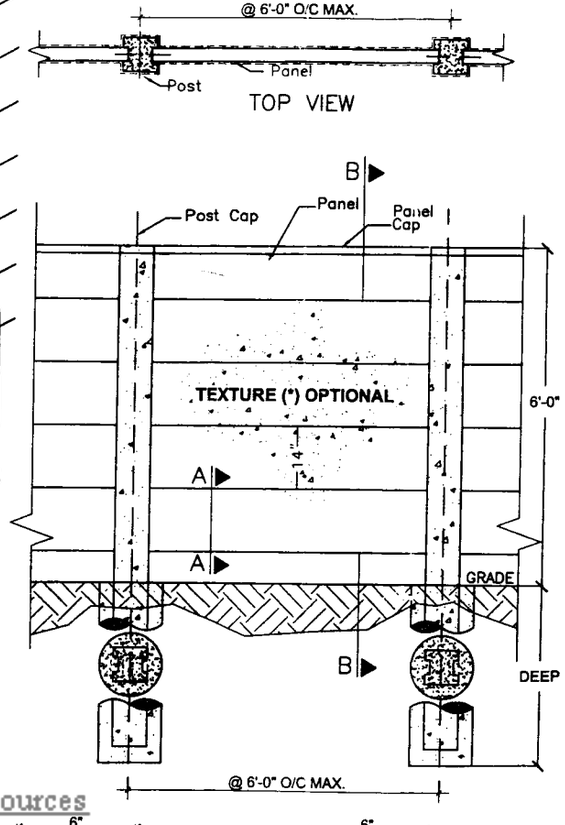
**CONCRETE FOOTING**

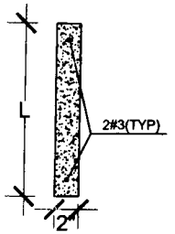
**b = 18 " Ø and d = 37 " Deep**

# 6'-0" HEIGHT FENCE



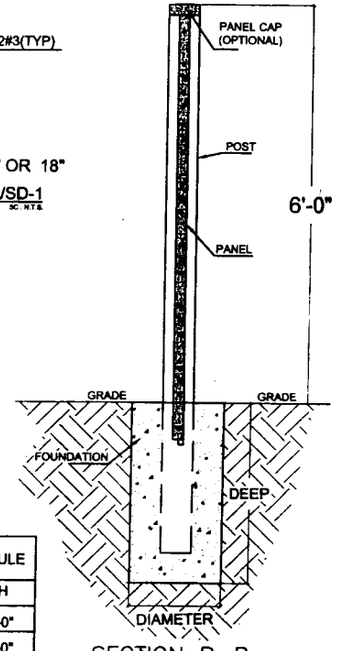

ISOMETRIC




L = 12" , 14" OR 18"

SECTION A/SD-1




SECTION B–B

| FOUNDATION SCHEDULE | | |
|---|---|---|
| DIAMETER | D | H |
| 12" | 43" | 6'-0" |
| 18" | 37" | 6'-0" |
| 24" | 33" | 6'-0" |

## GENERAL NOTES:

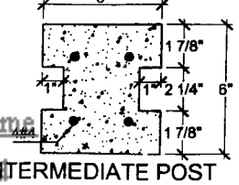
ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. DO NOT SCALE THE DRAWINGS. FOLLOW WRITTEN DIMENSIONS ONLY. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE AFFECTED PART OF THE WORK.
THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCES TO INSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION.

## DESIGN LOADS:

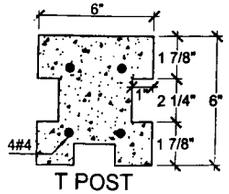
THE STRUCTURAL FRAMING WAS DESIGNED USING THE FOLLOWING SUPERIMPOSED LOADS. DESIGN WIND LOADS WERE DETERMINED IN ACCORDANCE WITH F.B.C 2010, ASCE 7-10.
WIND VELOCITY= 115 MPH EXPOSURE CATEGORY: C
IMPORTANCE FACTOR: 1.0 GCPI: +/- 0.00 Kd = 0.85

## STRUCTURAL NOTES

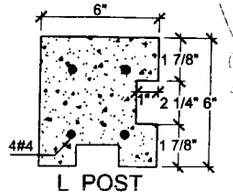
1. THIS WALL SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2010.
2. CONCRETE STRENGTH SHALL BE A MINIMUM OF 3,000 PSI ( 210 KG/CM ) AT 28 DAY
3. REBAR CONFORMS TO A.S.T.M. A615, GRADE 60
4. POST SHALL BE SET AT 6'-0" O/C.
5. CONCRETE COVER ACCORDING WITH ACI 318-02.
CONCRETE EXPOSED TO EARTH OR WEATHER:
WALL PANELS ..... 3/4"
OTHER MEMBERS ..... 1 1/4"



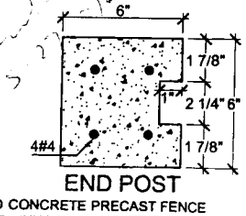

INTERMEDIATE POST




T POST




L POST




END POST

NOTE: - DESIGN LIMITED TO CONCRETE PRECAST FENCE
- ANY CORRECTIONS, INK MARKS, WHITE OUT OR STICK-ONS.

REVISIONS

| NO. | DATE | DESCRIPTION |
|---|---|---|
| 1 | 02-13 | |


MILTON CUBAS, P. E., INC.
CONSULTING ENGINEERS PE # 51902
C.A. # 27267 S.I. # 6999901
1302 NE 125 ST
NORTH MIAMI, FLORIDA 33161
PHONE: (305) 891-4174 FAX (305) 891-4175
E MAIL: miltoncubas@msn.com


FLORIDA

PRECAST FENCE 6'-0" H. X 6'-0" W.

M.A.D.I. CONSTRUCTION INC
13050 NW 30th AVE
OPA LOCKA, FL. 33024

DATE 05-29-12
SCALE AS SHOWN
DESIGNED A.G.
DRAWN A.G.
CHECKED

DRAWING NO. S-1


Miami Dade County Department of Regulatory And Economic Resources
0000696277 - 6/4/2015 8:19:57 AM
GENERAL01-03122015.pdf
Examiner Date Time Stamp Disp. Trade Stamp Name
Carlos Labiste 3/13/2015 8:18:38 AM STRU Approved